

We claim:

1. An apparatus with an easily cleaned surface coating that is heat-resistant at temperatures of at least 300°C, has outstanding properties and a thickness between 1 and 1000 nm;

wherein said surface coating contains a metal oxide network and a hydrophobic substance, said hydrophobic substance being distributed uniformly across said thickness of said surface coating; and

wherein said surface coating is hydrophobic and has a contact angle for water of greater than 90°.

2. The apparatus as defined in claim 1, further comprising a supporting substrate selected from the group consisting of glass, glass ceramic, metal, ceramic, plastic and laminated material, and wherein said surface coating is provided on said supporting substrate.

3. The apparatus as defined in claim 2, wherein said surface coating is provided on a surface of said supporting substrate to be coated after activation of said surface of said supporting substrate to be coated and/or after applying at least one or more suitable adhesives to said surface of said supporting substrate to be coated.

4. The apparatus as defined in claim 1, wherein said hydrophobic surface comprises at least one fluoroalkyl silane.
5. The apparatus as defined in claim 1, wherein said surface coating comprises a plurality of nanoscale particles.
6. The apparatus as defined in claim 1, wherein said surface coating is optically inconspicuous.
7. The apparatus as defined in claim 1, wherein said surface coating is heat-resistant up to temperatures of 400°C.
8. The apparatus as defined in claim 1, wherein said thickness of said surface coating is from 10 to 250 nm.
9. The apparatus as defined in claim 1, further comprising an additional protective layer for said surface coating and wherein said additional protective layer comprises an enamel and/or decorative or functional printing with ceramic or organic decorative paint.
10. The apparatus as defined in claim 1, consisting of a cooking appliance and/or components for said cooking appliance.

11. The apparatus as defined in claim 1, consisting of at least one of a baking oven, a cooking range, a microwave unit, a grill, an exhaust vapor hood with associated operating unit, a mixer, a puree forming device, a cooking vessel, a baking sheet and a baking mold.